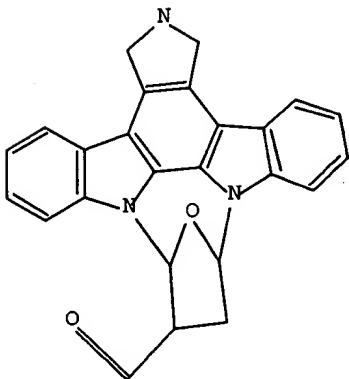


FILE 'REGISTRY' ENTERED AT 13:47:14 ON 25 JUL 2001

L11 STRUCTURE UPLOADED
L12 QUE L11
L13 48 S L12
L14 STRUCTURE UPLOADED
L15 QUE L14
L16 35 S L15
L17 709 S L15 SSS FUL
L18 STRUCTURE UPLOADED
L19 QUE L18
L20 STRUCTURE UPLOADED
L21 QUE L20
L22 47 S L19 SUB=L17 FUL
L23 698 S L21 SUB=L17 FUL
L24 708 S L23 OR L22
L25 STRUCTURE UPLOADED
L26 QUE L25
L27 683 S L26 SUB=L17 FUL
L28 332 S L27
L29 STRUCTURE UPLOADED
L30 QUE L29
L31 0 S L30 SUB=L17 SAM
L32 0 S L30 SUB=L17 FUL
L33 0 S L30
L34 0 S L30 FUL
L35 SCREEN 963
L36 STRUCTURE UPLOADED
L37 QUE L36 AND L35
L38 682 S L37 SUB=L17 FUL
L39 27 S L17 NOT L38
L40 13 S L39

=> d 115

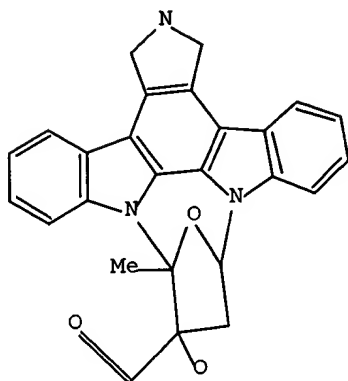
L15 HAS NO ANSWERS
L14 STR



Structure attributes must be viewed using STN Express query preparation.
L15 QUE L14

=> d 137

L37 HAS NO ANSWERS
L35 SCR 963
L36 STR



Structure attributes must be viewed using STN Express query preparation.
L37 QUE L36 AND L35

=> d bib abs hitstr 1-13 140

L40 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2001 ACS
AN 2000:456876 CAPLUS
DN 133:84297
TI Maleimide and carbazole derivatives for the treatment of conditions with
a need for the inhibition of glycogen synthase kinase-3 (GSK-3)
IN Coghlan, Matthew Paul; Holder, Julie Caroline; Reith, Alastair David;
Smith, David Glynn
PA Smithkline Beecham PLC, UK
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000038675	A1	20000706	WO 1999-GB4374	19991222
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

OS MARKPAT 133:84297
AB A method of treatment and/or prophylaxis of conditions assocd. with a
need

for the inhibition of GSK-3 comprises the administration of certain maleimide or carbazole compds., or pharmaceutically acceptable derivs. thereof. Also provided is the use of such compds. in the manuf. of a medicament for the treatment of conditions assocd. with the need for GSK-

3

inhibition.

IT 145672-05-5 145672-05-5D, derivs.

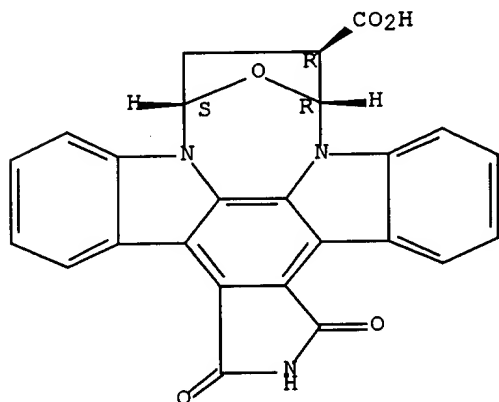
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

therapeutic use// BION (Biological study// CBZS (CBZS,
(maleimide and carbazole derivs. for treatment of conditions with need
for inhibition of glycogen synthase kinase-3)

RN 145672-05-5 CAPLUS

RN 145672-03-5 CAPICS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-1,3-
dioxo-, (9R,10R,12R)-rel- (9CI) (CA INDEX NAME)

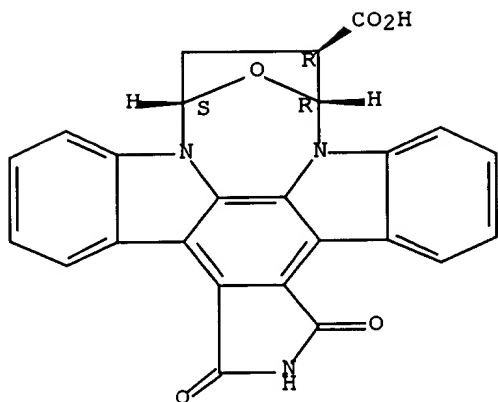
Relative stereochemistry.



RN 145672-05-5 CAPLUS

9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-1,3-dioxo-, (9R,10R,12R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 7

RE

- (1) Chiron Corp; WO 9816528 A 1998 CAPLUS
- (2) Engel, G; US 5710145 A 1998 CAPLUS
- (3) Hoffmann, L; EP 0328026 A 1989 CAPLUS
- (4) Hoffmann, L; EP 0470490 A 1992 CAPLUS
- (5) Schotten, T; US 5545636 A 1996 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2001 ACS

AN 1998:352627 CAPLUS

DN 129:54476

TI Protein kinase inhibitors for treatment of neurological disorders

IN Lewis, Michael E.; Kauer, James C.; Neff, Nicola; Roberts-Lewis, Jill; Murakata, Chikara; Saito, Hiromitsu; Matsuda, Yuzuru; Glicksman, Marcie A.; Kanai, Fumihiko; Kaneko, Masami

PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.

SO U.S., 61 pp. Cont.-in-part of U.S. Ser. No. 329,540.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5756494	A	19980526	US 1995-456642	19950602
	US 5461146	A	19951024	US 1993-96561	19930722
	EP 768312	A2	19970416	EP 1996-116661	19930726
	EP 768312	A3	19970604		
	EP 768312	B1	20000906		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	EP 1002534	A1	20000524	EP 1999-120008	19930726
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
	US 5621100	A	19970415	US 1994-329540	19941026
	CA 2203767	AA	19960509	CA 1995-2203767	19951004
	WO 9613506	A1	19960509	WO 1995-US12965	19951004
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,				

	SN, TD, TG				
	AU 9539516	A1	19960523	AU 1995-39516	19951004
	AU 704314	B2	19990422		
	EP 788501	A1	19970813	EP 1995-937391	19951004
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,				
SE	BR 9509480	A	19970930	BR 1995-9480	19951004
	JP 10510514	T2	19981013	JP 1995-514605	19951004
	US 5741808	A	19980421	US 1997-800383	19970214
PRAI	US 1992-920102	B2	19920724		
	US 1993-96561	A2	19930722		
	US 1994-329540	A2	19941026		
	EP 1993-917337	A3	19930726		
	EP 1996-116661	A3	19930726		
	US 1995-456642	A	19950602		
	WO 1995-US12965	W	19951004		
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Derivs. of K-252a I (R = HO, MeO; R1 = H, Br, NHCONHPh, CH2SPh, 2-pyrimidinylthiomethyl, 2-furylmethylthiomethyl, etc.; R2 = H, Br, Cl, CH2OH, etc.; R 3 = CH2OH, CO2Me, CH2NHCO2Ph, CONHPh, CH2NHCO2Me, etc.; Z =

= O, H2), as well as novel bis-N-substituted derivs. of staurosporine XNMeWNMeX (W = C(:Y)NH, W1NHC(:Y); W1 = hydrocarbylene radical of 2-20 carbon atoms; Y = O, S) were prepd. The invention also features a method for treating diseased neuronal cells involving the administration of either the novel staurosporine derivs. or specified functional derivs. of K-252a. Thus, staurosporine was treated with hexamethyl-bis-isocyanate

to give 1,6-hexamethylene-bis-(carbamylstaurosporine). The spinal cord choline acetyltransferase (CHAT) activity of I (R = OH, R1 = R2 = Br; R3 =

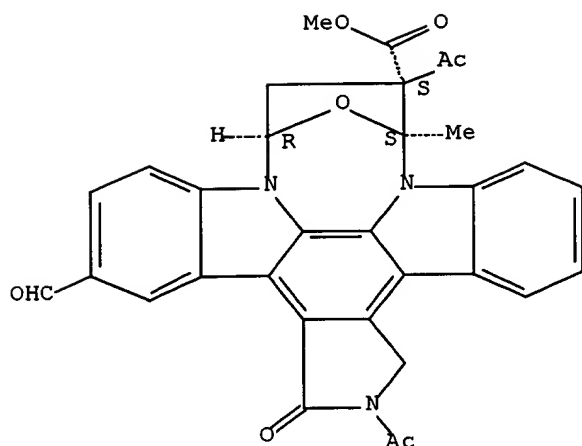
= CH2OH, Z = H2) at 300 nM was 146 compared with K-252a of 100.

IT **208651-60-9**
 RL: RCT (Reactant)
 (prepn. of staurosporine and K-252a derivs. as protein kinase inhibitors for treatment of neurol. disorders)

RN 208651-60-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,9-diacetyl-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10S,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L40 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2001 ACS

AN 1997:220658 CAPLUS

DN 126:212286

TI Preparation of staurosporine derivatives

IN Fredenhagen, Andreas; Moerker, Theophile; Peter, Heinrich

PA Ciba-Geigy A.-G., Switz.; Fredenhagen, Andreas; Moerker, Theophile; Peter,

Heinrich

SO PCT Int. Appl., 42 pp.

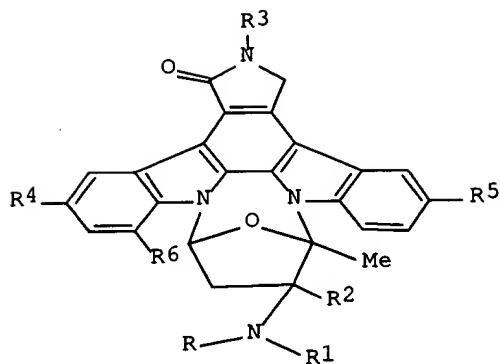
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9705140	A1	19970213	WO 1996-EP3163	19960718
	W:				
	AL, AU, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP,				
	KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK,				
	TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,				
	IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,				
	MR, NE, SN, TD, TG				
	AU 9666575	A1	19970226	AU 1996-66575	19960718
PRAI	EP 1995-810493		19950731		
	WO 1996-EP3163		19960718		
OS	MARPAT 126:212286				
GI					



I

AB Staurosporine derivs. I [X = CH₂, CO; R = H, acyl, (un)substituted alkyl, R₁ = H, alkyl; R₂ = (un)substituted CO₂H; R₃ = H, halogen, amino, acyl, alkyl, aralkyl; R₄, R₅ = H, OH, NO₂, amino, alkyl, alkoxy, carbamoyl, halogen; R₆ = H, NO₂] were prepd. for use as protein kinase C and phosphorylase kinase inhibitors and immunosuppressants. The IC₅₀ were 0.01-0.2 .mu.mole/L for protein kinase inhibition and 0.005-0.2

.mu.mole/L

for phosphorylase kinase inhibition. Staurosporine was oxidized to the 4-oxo deriv. which was converted to its oxime and subjected to ring contraction, followed by acylation to give 3'-benzoylamino-3'-methoxycarbonylcyclooctatrin-5-one [I, R = Bz, R₁ = H, R₂ = CO₂Me, R₃-R₆ = H].

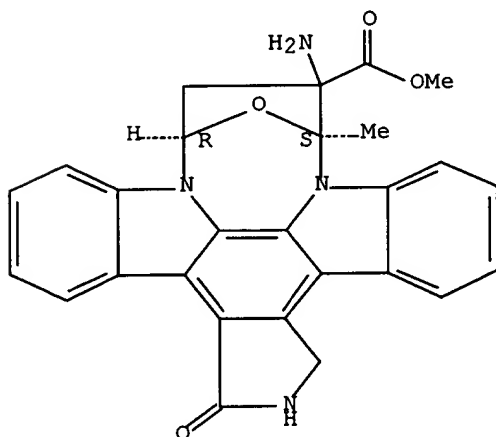
IT **187939-92-0P 187939-96-4P 187939-97-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of staurosporine derivs.)

RN 187939-92-0 CAPLUS

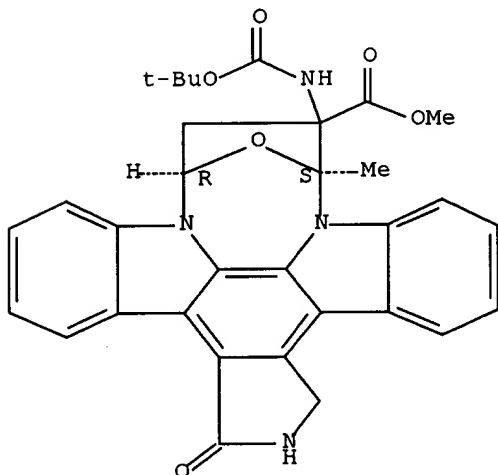
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-amino-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,12R)-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



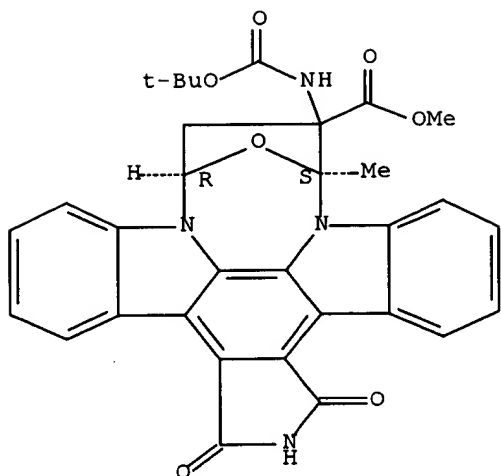
RN 187939-96-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-[[(1,1-dimethylethoxy) carbonyl] amino]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,12R)-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 187939-97-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-[[(1,1-dimethylethoxy) carbonyl] amino]-2,3,9,10,11,12-hexahydro-9-methyl-1,3-dioxo-, methyl ester, (9S,12R)-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 187939-93-1P 187939-94-2P 187939-95-3P

187939-98-6P 187939-99-7P 187940-00-7P

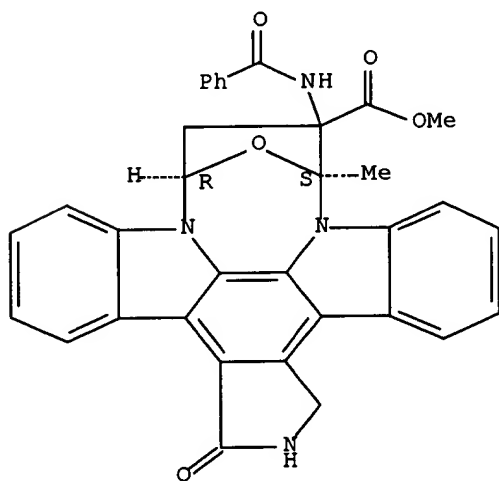
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of staurosporine derivs.)

RN 187939-93-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(benzoylamino)-
2,3,9,10,11,12-

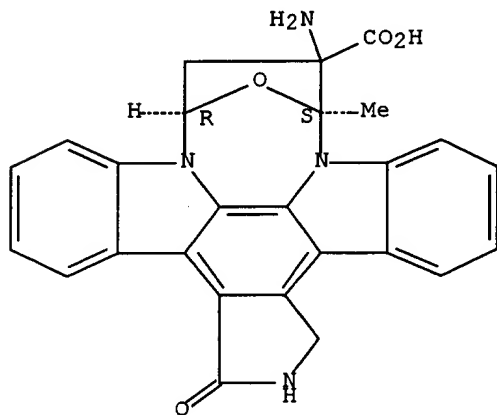
hexahydro-9-methyl-1-oxo-, methyl ester, (9S,12R)-[partial]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



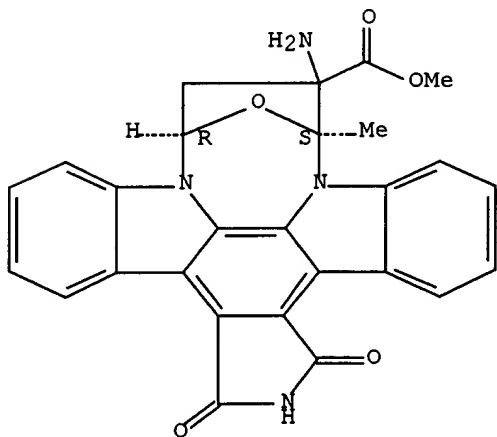
RN 187939-94-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-amino-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, (9S,12R)-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



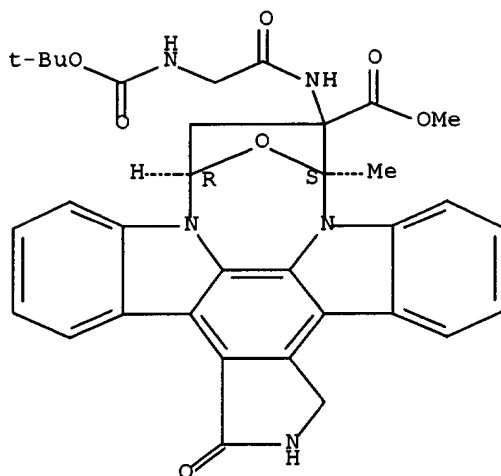
RN 187939-95-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-amino-2,3,9,10,11,12-hexahydro-9-methyl-1,3-dioxo-, methyl ester, (9S,12R)-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 187939-98-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-[[[(1,1-dimethylethoxy)carbonyl]amino]acetyl]amino]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,12R)-[partial]- (9CI) (CA INDEX NAME)

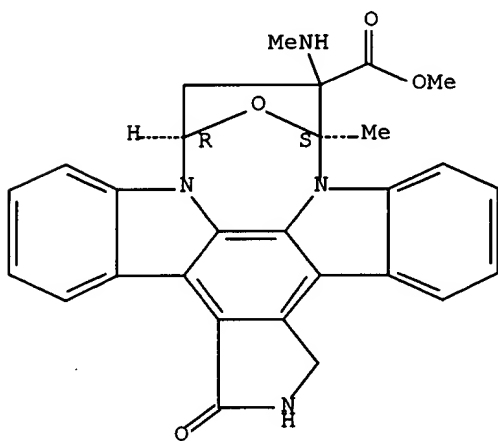
Absolute stereochemistry.



RN 187939-99-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-9-methyl-10-(methylamino)-1-oxo-, methyl ester, (9S,12R)-[partial]- (9CI)
(CA INDEX NAME)

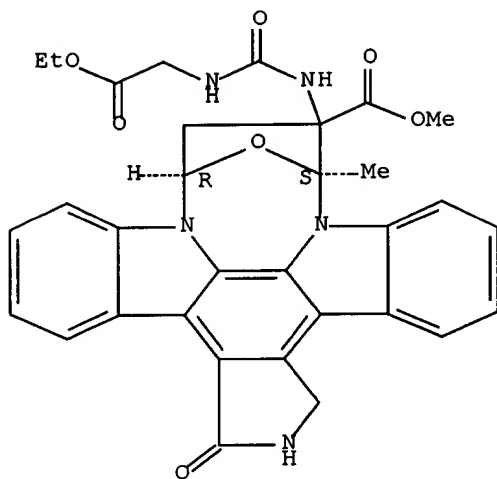
Absolute stereochemistry.



RN 187940-00-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-[[[(2-ethoxy-2-oxoethyl)amino]carbonyl]amino]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,12R)-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L40 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2001 ACS

AN 1996:652178 CAPLUS

DN 125:296777

TI The staurosporine producing strain *Streptomyces longisporoflavus* produces metabolites related to K-252a. Proposal for biosynthetic intermediates of K-252a

AU Cai, Yang; Fredenhagen, Andreas; Hug, Paul; Peter, Heinrich H.

CS Pharmaceutical Res. Phys. Dep., CIBA-GEIGY Ltd., Basel, 4002, Switz.

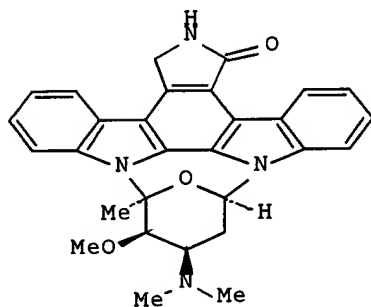
SO J. Antibiot. (1996), 49(10), 1060-1062

CODEN: JANTAJ; ISSN: 0021-8820

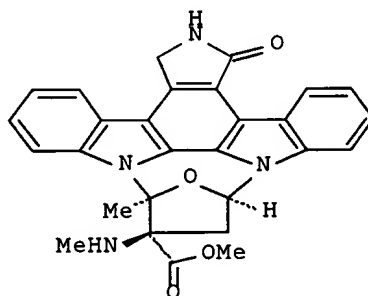
DT Journal

LA English

GI



I



II

AB The structure elucidation, physicochem. data, and biol. properties of minor metabolites N-methylstaurosporine (I) and 3'-methylamino-3'-deoxy-K252a (II) of *S. longisporoflavus* are described. I and II inhibit porcine

protein kinase C and other kinases. The biosynthetic pathway of I and II and other staurosporine-related compds. is discussed.

IT 183145-61-1

RL: BAC (Biological activity or effector, except adverse); BOC (Biological

occurrence); MFM (Metabolic formation); PRP (Properties); BIOL

(Biological

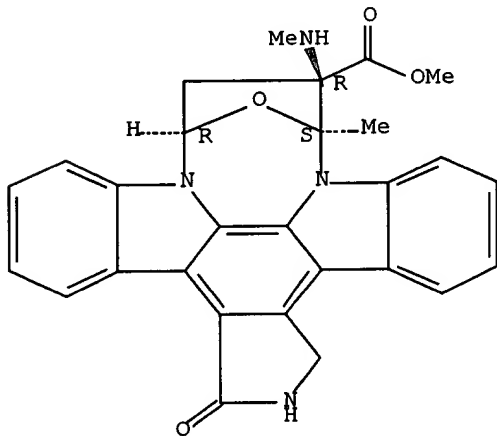
study); FORM (Formation, nonpreparative); OCCU (Occurrence)

(staurosporine-producing *Streptomyces longisporoflavus* produces metabolites related to K-252a)

RN 183145-61-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-9-methyl-10-(methylamino)-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L40 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2001 ACS

AN 1996:60148 CAPLUS

DN 124:202708

TI New stereoselective Beckmann-type rearrangement leading to ring contraction

AU Fredenhagen, Andreas; Peter, Heinrich H.

CS Pharmaceutical Res. Dep., Ciba-Geigy, Basel, CH-4002, Switz.

SO Tetrahedron (1996), 52(4), 1235-8

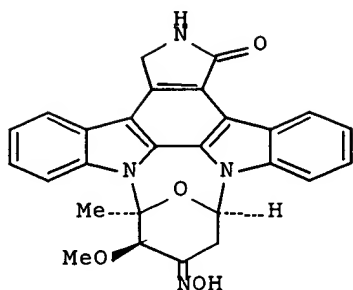
CODEN: TETRAB; ISSN: 0040-4020

DT Journal

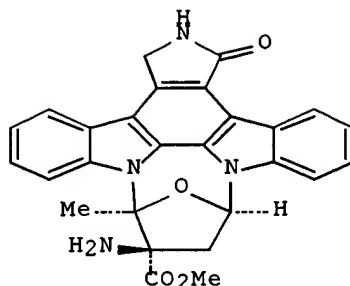
LA English

OS CASREACT 124:202708

GI



I



II

AB In a new stereospecific reaction the known oxime TAN-1030A (I) gave rise to a ring contraction to yield compd. II closely related to the metabolite

K-252a. The structure was elucidated by spectroscopic comparison with K-252a. The compd. strongly inhibited protein kinase C with IC50 values of 0.18 μ M. This reaction suggests that TAN-1030A is a biosynthetic precursor of K-252. The abs. stereochem. of K-252a was assigned by comparison of CD spectra.

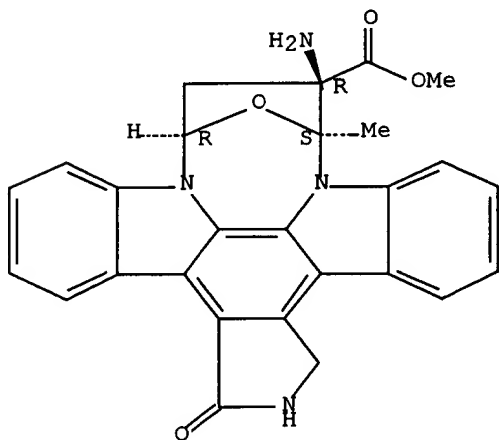
IT **173738-89-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(stereoselective Beckmann-type rearrangement leading to ring contraction)

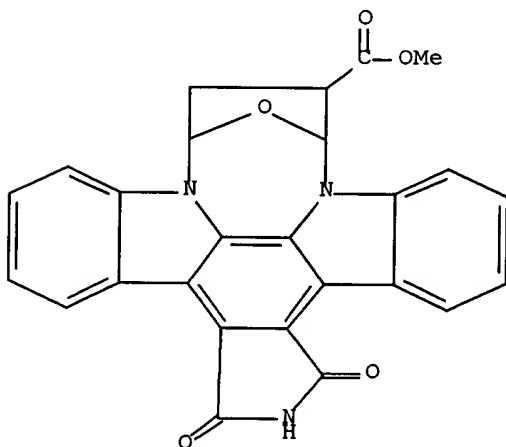
RN 173738-89-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-amino-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



DN 123:246447
 TI In vitro vasorelaxant effects of indolocarbazole and bis-indole protein kinase C inhibitors on rabbit renal arteries
 AU Fabre, S.; Prudhomme, M.
 CS Laboratoire de Chimie Organique Biologique, Universite, Blaise Pascal, Aubiere, F-63177, Fr.
 SO Arch. Int. Pharmacodyn. Ther. (1995), 329(3), 397-404
 CODEN: AIPTAK; ISSN: 0003-9780
 DT Journal
 LA English
 AB The effects of 12 compds., structural related to the indolocarbazole bacterial metabolite staurosporine, on caffeine-induced contractions in rabbit renal arteries were studied. Eight of these compds. are effective protein kinase C inhibitors, the others are inactive towards the enzyme. The results show a link between the protein kinase C inhibitory activity and the inhibition of vascular smooth muscle contraction. However, a strong inhibition of protein kinase C is required to observe the vasorelaxant effect.
 IT **158619-71-7**
 RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
 (vasorelaxant effects of indolocarbazole and bis-indole protein kinase C inhibitors on rabbit renal arteries)
 RN 158619-71-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-1,3-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L40 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2001 ACS
 AN 1995:777654 CAPLUS
 DN 123:198839
 TI Preparation of indolocarbazole derivatives to treat prostatic cancer and hypertrophy
 IN Dionne, Craig A.; Contreras, Patricia C.; Murakata, Chikara
 PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.
 SO PCT Int. Appl., 95 pp.
 CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9427982	A1	19941208	WO 1994-US6082	19940527
	W: AU, CA, FI, HU, JP, KR, LK, NO, NZ, PL, RO, RU, UA				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2163904	AA	19941208	CA 1994-2163904	19940527
	AU 9469607	A1	19941220	AU 1994-69607	19940527
	AU 679752	B2	19970710		
	EP 699204	A1	19960306	EP 1994-918168	19940527
	EP 699204	B1	19980415		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	EP 839814	A2	19980506	EP 1998-200023	19940527
	EP 839814	A3	19980916		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
	AT 165097	E	19980515	AT 1994-918168	19940527
	ES 2118414	T3	19980916	ES 1994-918168	19940527
	FI 9505709	A	19960103	FI 1995-5709	19951127
	NO 9504816	A	19960126	NO 1995-4816	19951127
PRAI	US 1993-69178		19930528		
	US 1993-96622		19930722		
	EP 1994-918168		19940527		
	WO 1994-US6082		19940527		
OS	MARPAT 123:198839				
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R = OH, alkoxy, acyloxy; R1, R2, R5, R6 = H, Cl, F, Br, I, NO2, CN, substituted ureido, etc.; X = H, CONHPh, etc.; Z1, Z2 = H,

O (when combined)] [II; R1, R2, R5, R6 = H, halogen, NO2, CN, OH, substituted ureido; R3, R4 = H. alkyl, hydroxyalkyl, alkenyl; Z1, Z2 = H, O (when combined)], useful as inhibitors of tyrosine kinase activity assocd. with neurotrophin receptors for treating benign prostatic hypertrophy or prostate cancer, are prepd. Thus, oxadiazepine I (R = OH, R1 = R2 = R5 = R6 = Z1 = Z2 = H, X = CONHCH2CH2OH) was prepd. and demonstrated a IC50 of 0.038 .mu.M against the Tsu-Pr1 human prostate cancer cell line.

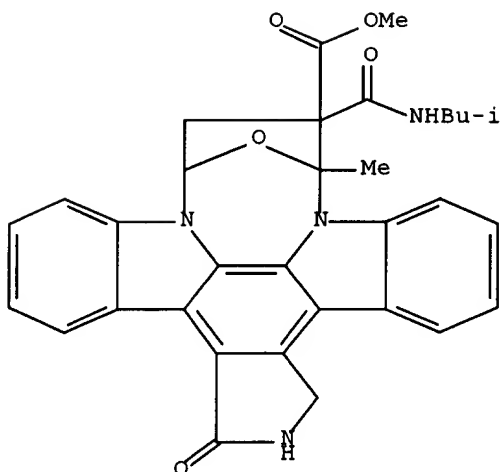
IT 167371-01-9

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(claimed compd.; prepn. of indolocarbazole derivs. to treat prostatic cancer and benign prostatic hypertrophy)

RN 167371-01-9 CAPLUS

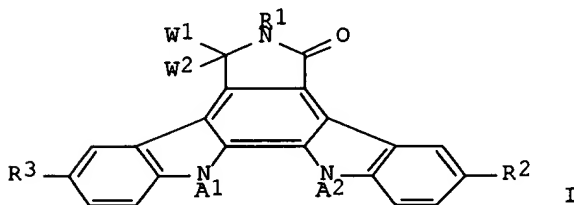
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-9-methyl-10-[[[(2-methylpropyl)amino]carbonyl]-1-oxo-, methyl ester, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)

Currently available stereo shown.



L40 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2001 ACS
 AN 1995:216587 CAPLUS
 DN 122:10020
 TI preparation of benzodiindole derivatives as antithrombotics
 IN Tamaoki, Tatsuya; Shiotsu, Yukimasa; Murakata, Chikara; Akinaga, Shiro;
 Okabe, Masami; Saitoh, Yutaka; Watanabe, Junichi; Shiraki, Takako
 PA Kyowa Hakko Kogyo Co., Ltd., Japan
 SO PCT Int. Appl., 65 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9406799	A1	19940331	WO 1993-JP1346	19930920
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 630898	A1	19941228	EP 1993-919687	19930920
	R: DE, ES, FR, GB, IT				
	US 5674867	A	19971007	US 1994-244111	19940518
PRAI	JP 1992-250941		19920921		
	WO 1993-JP1346		19930920		
OS	MARPAT 122:10020				
GI					

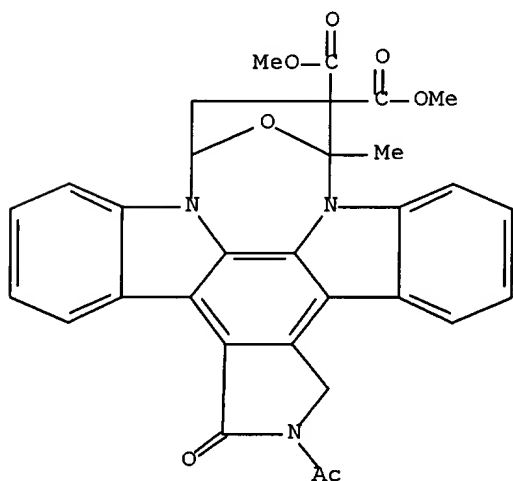


AB Title compds. I [R1 = H, alkyl, alkanoyl, benzyl, amino; R2 = H, OH, alkoxy, alkanoyl, halo, etc.; R3 = H, alkanoyl, halo, OH, alkoxy; W1, W2 = H, OH, alkylthio, etc.; A1, A2 = H, or together = 4-(methylamino)-2-methyl-3-methoxytetrahydro-2,6-pyrandiyl, etc.] are prepd. and their blood platelet aggregation inhibiting activities were evaluated. E.g., I [R1-
R3 = H, W1 = H, W2 = OH, A1A2 = Q] at 1 nM showed 127% inhibition of blood platelet aggregation compared with 100% for the control.

IT 159293-40-0P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as antithrombotic)

RN 159293-40-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10,10(9H)-dicarboxylic acid, 2-acetyl-2,3,11,12-tetrahydro-9-methyl-1-oxo-, dimethyl ester (9CI) (CA INDEX NAME)



L40 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2001 ACS

AN 1995:35271 CAPLUS

DN 122:5286

TI Antimicrobial activities of indolocarbazole and bis-indole protein kinase C inhibitors

AU Sancelme, Martine; Fabre, Serge; Prudhomme, Michelle

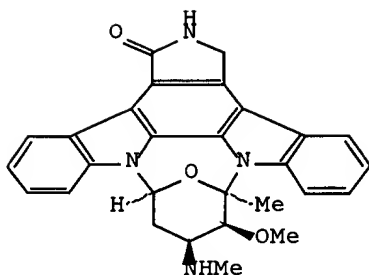
CS Laboratoire Chimie Organique Biologique, Universite Blaise Pascal, Aubiere, 63177, Fr.

SO J. Antibiot. (1994), 47(7), 792-8
CODEN: JANTAJ; ISSN: 0021-8820

DT Journal

LA English

GI



I

AB The antimicrobial activities of twenty-two substances structurally related

to staurosporine (I), aglycon in the indolocarbazole and bis-indole series

were examd. against *Streptomyces chartreusis* and *Streptomyces griseus*, *Bacillus cerus*, *Escherichia coli*, *Candida albicans* and *Botrytis cinerea*. Inhibition of sporulation was examd. also on the two *Streptomyces* species.

Unlike literature reports for efficient protein kinase inhibitors, staurosporine and K-252a, no evident correlation could be found either between protein kinase inhibitory potencies and inhibition of sporulation of the *Streptomyces* species or protein kinase between inhibitory potencies

and growth of all microorganisms tested. A weak activity against *C. albicans* was obsd. for the chloro-indolocarbazole compds. as already reported for structurally related substances from the cyanobacterium *Tolypothrix tjipanasensis*.

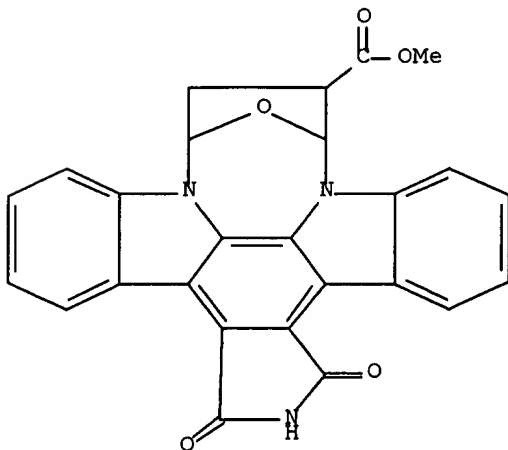
IT 158619-71-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

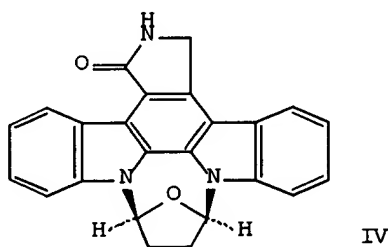
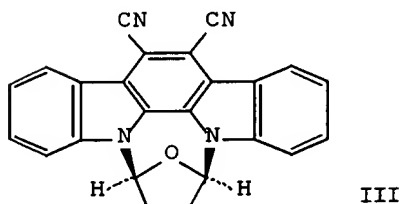
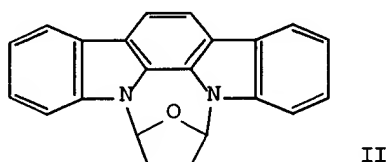
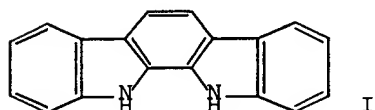
(prepn. and antimicrobial activity testing and protein kinase C-inhibiting activity of)

RN 158619-71-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-1,3-dioxo-, methyl ester (9CI) (CA INDEX NAME)

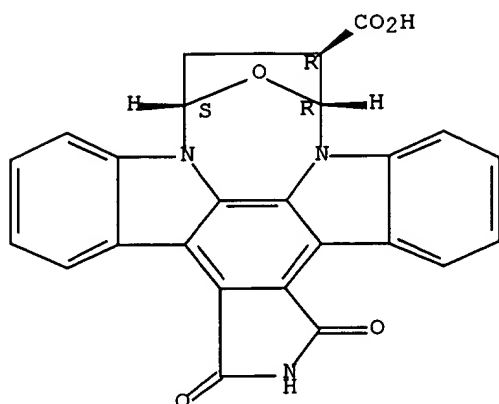


L40 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2001 ACS
 AN 1994:192193 CAPLUS
 DN 120:192193
 TI Indolocarbazoles. 1. Total synthesis and protein kinase inhibiting characteristics of compounds related to K-252c
 AU McCombie, Stuart W.; Bishop, Robert W.; Carr, Donna; Dobek, Emily; Kirkup, Michael P.; Kirschmeier, Paul; Lin, Sue Ing; Petrin, Joanne; Rosinski, Karen; et al.
 CS Schering-Plough Res. Inst., Kenilworth, NJ, 07033-0539, USA
 SO Bioorg. Med. Chem. Lett. (1993), 3(8), 1537-42
 CODEN: BMCLE8; ISSN: 0960-894X
 DT Journal
 LA English
 GI

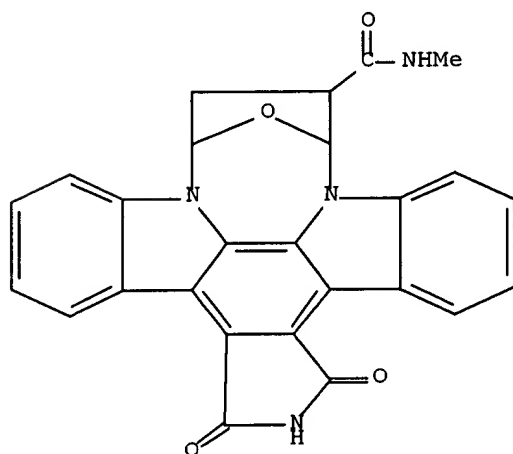


AB The cyclocondensation of indolo[2,3-a]-carbazole I with 2,5-dimethoxytetrahydrofuran derivs. gave cyclofuranosylated compds., e.g. II,, which were converted via dibromo compds. to the dinitriles, e.g. III.
 Hydrolysis, hydrolysis-redn. and thiolysis afforded imides, lactams, e.g. IV and their thio analogs. These compds. were potent inhibitors of the protein kinase C family.
 IT **145672-05-5 153606-82-7 153606-83-8**
 RL: RCT (Reactant)
 (as inhibitor of protein kinase C)
 RN 145672-05-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-1,3-dioxo-, (9R,10R,12R)-rel- (9CI) (CA INDEX NAME)

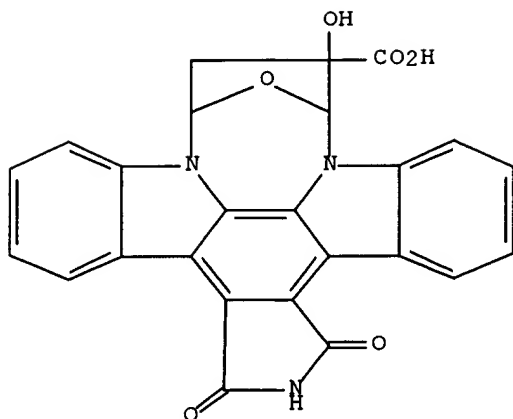
Relative stereochemistry.



RN 153606-82-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxamide, 2,3,9,10,11,12-hexahydro-N-methyl-1,3-dioxo-, (9.alpha.,10.alpha.,12.alpha.)- (9CI) (CA INDEX NAME)



RN 153606-83-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-1,3-dioxo-, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)



L40 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2001 ACS

AN 1993:517283 CAPLUS

DN 119:117283

TI Preparation of 9,13-epoxy-1H,9H-diindolo[1,2,3-gh:3',2',1'-lm]pyrolo[3,4-j][1,7]benzodiazonine-1,3-diones and related compounds as antitumor and antipsoriatic agents

IN McCombie, Stuart W.; Shankar, Bandarpalle B.; Kirkup, Michael P.

PA Schering Corp., USA

SO Eur. Pat. Appl., 110 pp.

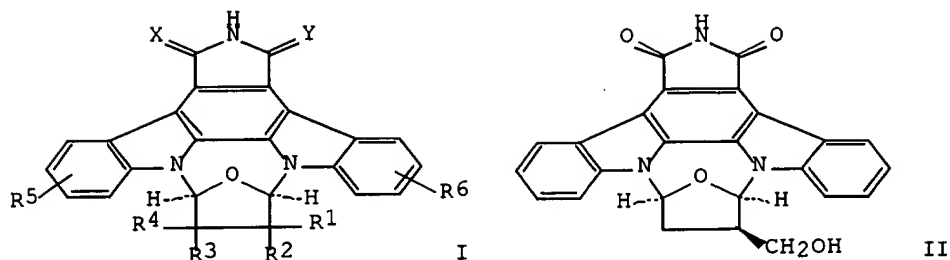
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 508792	A1	19921014	EP 1992-303187	19920409
	R: PT				
	CA 2108146	AA	19921012	CA 1992-2108146	19920409
	WO 9218507	A1	19921029	WO 1992-US2661	19920409
	W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MW, NO, PL, RO, RU, SD, US				
	RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE				
	AU 9217982	A1	19921117	AU 1992-17982	19920409
	AU 646163	B2	19940210		
	EP 580812	A1	19940202	EP 1992-917468	19920409
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
	JP 06503837	T2	19940428	JP 1992-510240	19920409
	HU 70187	A2	19950928	HU 1993-2869	19920409
	NO 9303611	A	19931008	NO 1993-3611	19931008
PRAI	US 1991-683770		19910411		
	WO 1992-US2661		19920409		
OS	MARPAT 119:117283				
GI					

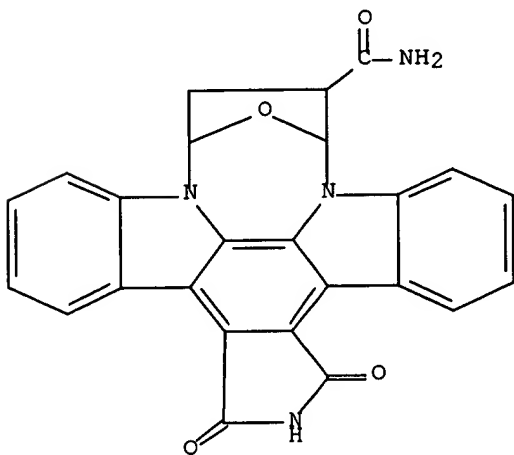


AB Title compds. [I; X = O, S; Y = O, NH, (H, H), (H, OH), S; R1-R4 = H, CHO, cyano, carbamoyl, CO2H, alkoxy, alkylthio, (acyl)amino, oximinomethyl, etc.; or R1R2, R3R4 = O, NOH, alkoxyimino, CH2, NNHCONH2; or R1R4 = bond; R5, R6 = H, F, Cl, Br, OH, N3, SH, (substituted) alkyl, alkoxy, alkylthio, (acyl)amino, etc.; with provisos], were prepd. Thus, dibenzyl, indolo[2,3-a]carbazole-5,6-dicarboxylate was stirred 2 h with 2,5-dimethoxy-5-acetoxymethyltetrahydrofuran and 4-MeC6H4SO3H in CH2Cl2 to give the cycloaddn. product, which was heated with NH3 in Me2SO at 120.degree. to give title compd. II. I inhibited protein kinase C with IC50 = 0.5-230 nM.

IT 145671-99-4P 145672-05-5P 145672-06-6P
145672-07-7P 145672-08-8P 145672-09-9P
145672-10-2P 145773-52-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as antitumor and antipsoriatic agent)

RN 145671-99-4 CAPLUS

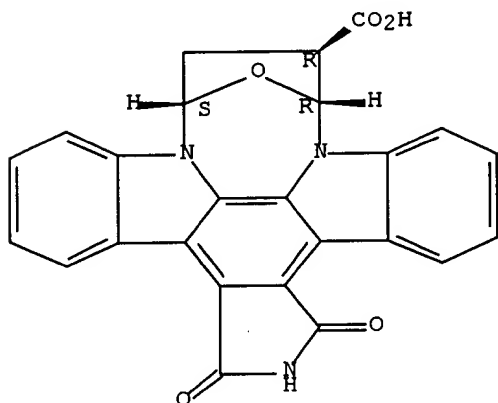
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxamide, 2,3,9,10,11,12-hexahydro-1,3-dioxo-(9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)



RN 145672-05-5 CAPLUS

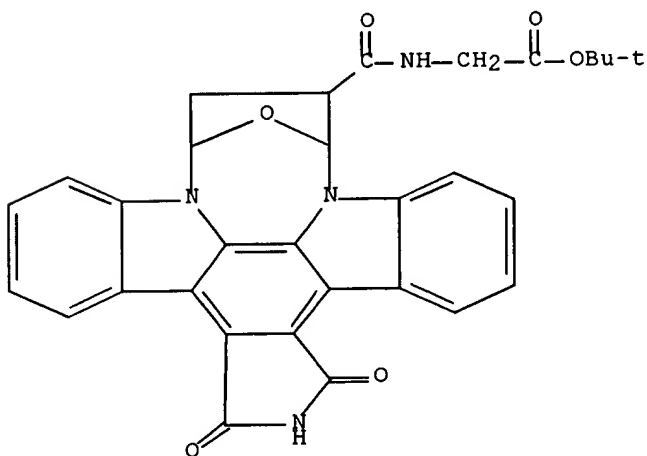
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-1,3-dioxo-, (9R,10R,12R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 145672-06-6 CAPLUS

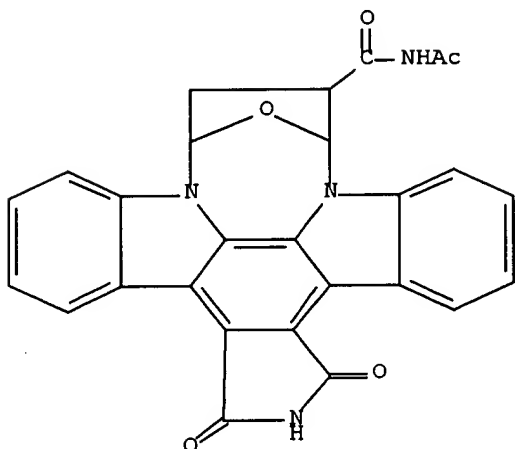
CN Glycine, N-[(2,3,9,10,11,12-hexahydro-1,3-dioxo-9,12-epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocin-10-yl)carbonyl]-, 1,1-dimethylethyl ester, (9.alpha.,10.alpha.,12.alpha.)-(9CI) (CA INDEX NAME)



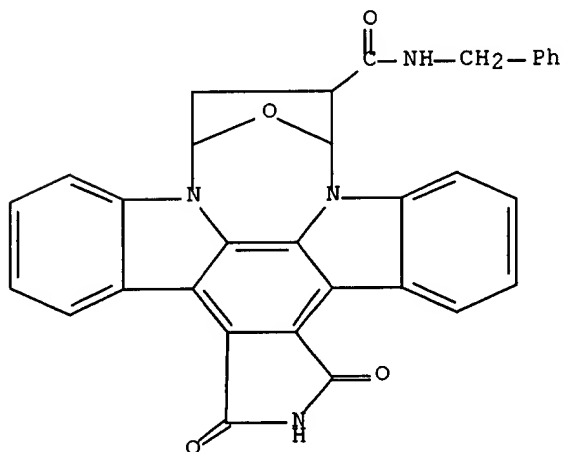
RN 145672-07-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxamide, N-acetyl-2,3,9,10,11,12-hexahydro-

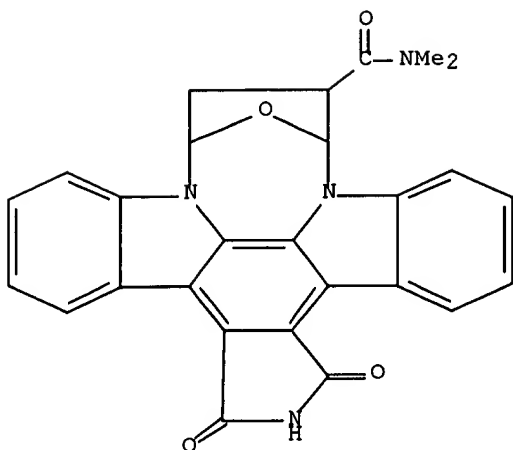
1,3-dioxo-, (9.alpha.,10.alpha.,12.alpha.)- (9CI) (CA INDEX NAME)



RN 145672-08-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxamide, 2,3,9,10,11,12-hexahydro-1,3-dioxo-
 N- (phenylmethyl)-, (9.alpha.,10.alpha.,12.alpha.)- (9CI) (CA INDEX NAME)

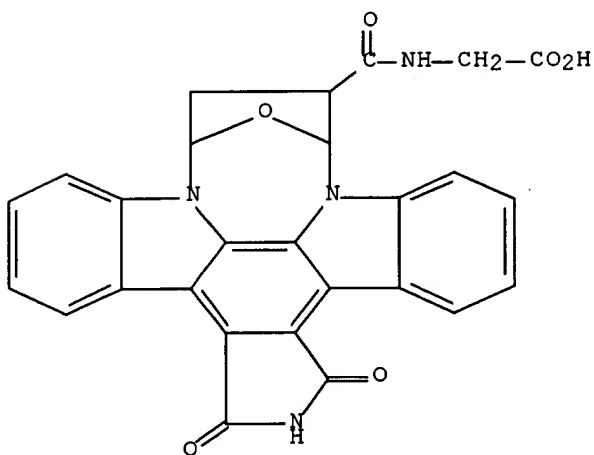


RN 145672-09-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxamide, 2,3,9,10,11,12-hexahydro-N,N-dimethyl-1,3-dioxo-, (9.alpha.,10.alpha.,12.alpha.)- (9CI) (CA INDEX NAME)



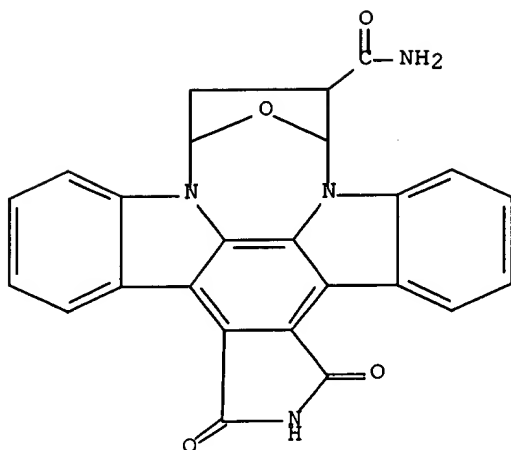
RN 145672-10-2 CAPLUS

CN Glycine, N-[(2,3,9,10,11,12-hexahydro-1,3-dioxo-9,12-epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocin-10-yl)carbonyl]-, (9.alpha.,10.alpha.,12.alpha.)- (9CI) (CA INDEX NAME)



RN 145773-52-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxamide, 2,3,9,10,11,12-hexahydro-1,3-dioxo-(9.alpha.,10.alpha.,12.alpha.)- (9CI) (CA INDEX NAME)

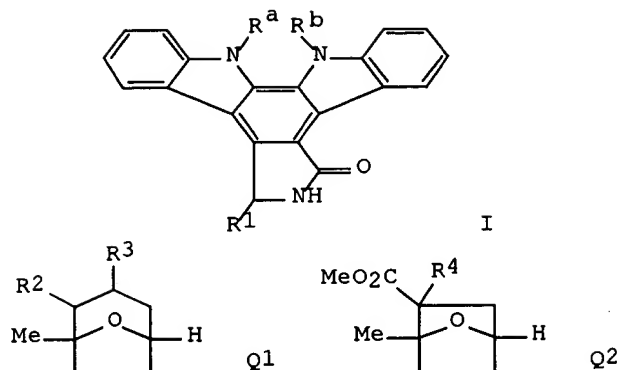


L40 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2001 ACS
 AN 1992:39768 CAPLUS
 DN 116:39768
 TI Indolocarbazoles from *Saccharothrix aerocolonigenes copiosa*
 IN Barrabee, Ellen B.; Horan, Ann C.; Gentile, Frank A.; Patel, Mahesh G.
 PA Schering Corp., USA
 SO PCT Int. Appl., 49 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9109034	A1	19910627	WO 1990-US7174	19901212
	W: AU, BB, BG, BR, CA, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU				
	RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG				
	AU 9170359	A1	19910718	AU 1991-70359	19901212
	US 5618809	A	19970408	US 1995-394937	19950227
PRAI	US 1989-451271		19891214		
	US 1989-451487		19891214		
	WO 1990-US7174		19901212		
OS	MARPAT 116:39768				
GI					



AB Indolocarbazoles I (R^a, R^b = H; R^a, R^b together = Q1, Q2; R1, R2 = H, OH, OMe; R3 = OH, NHMe, NMeCOMe, NHCOMe; R4 = OH, H; with provisions) and stereochem. isomers or pharmaceutically acceptable acid addn. salts are useful for inhibiting myosin light chain kinase, protein kinase C, or tumor cell proliferation as well as producing an antihypertensive effect and an anti-inflammatory effect in warm-blooded animals such as man. I are purified from an indolocarbazole complex produced by fermn. of *S. aerocolonigenes copiosa*. Characteristics of this new organism, fermn. conditions, and chromatog. purifn. of I are described. Structures and physiochem. data for many I are presented.

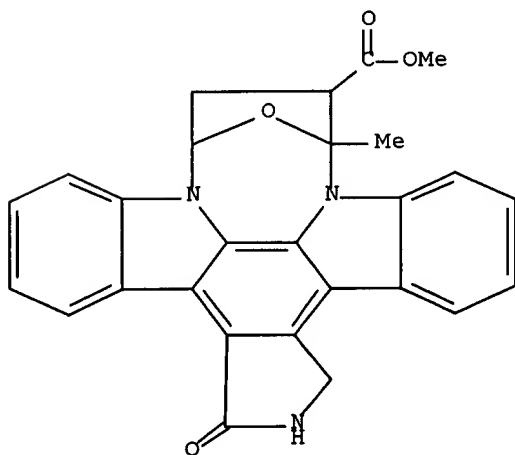
IT **137909-41-2P**

RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP (Preparation)

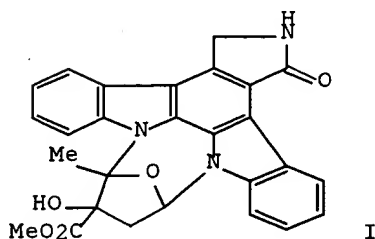
(manuf. of, by *Saccharothrix aerocolonigenes copiosa* fermn.)

RN 137909-41-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



L40 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2001 ACS
 AN 1986:31427 CAPLUS
 DN 104:31427
 TI A new antibiotic SF-2370 produced by Actinomadura
 AU Koyama, Masao; Kai, Fumio; Shomura, Takashi; Kojima, Michio
 CS Pharm. Res. Lab., Meiji Seika Kaisha, Ltd., Yokohama, 222, Japan
 SO J. Antibiot. (1985), 38(10), 1437-9
 CODEN: JANTAJ; ISSN: 0021-8820
 DT Journal
 LA English
 GI



AB The isolation of antibiotic SF-2370 (I) from Actinomadura SF-2370 and its structural identification and antimicrobial activity are reported. At 6.25 mg/L, I inhibited *Micrococcus luteus*, *M. flavus*, and *Corynebacterium bovis*. *Cryptococcus neoformans* And *Trichophyton interdigitale* were also inhibited by I at 25 mg/L.
 IT **99520-37-3P**
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and NMR spectrum of)
 RN 99520-37-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

